# **RECREATION VISITATION** MODEL

**Estimates Recreation Attendance at Lake Oroville and** the Thermalito Forebay

### **Purpose of the Model**

- Estimate recreation use of the Oroville Facilities; in particular, Lake Oroville and the Thermalito Forebay
- Evaluate the effects of proposed resource actions on recreation use

### **Model Components**

 Time series regression models that estimate recreation attendance at Lake Oroville and the Thermalito Forebay as a function of a set of independent variables, including lake levels, economic conditions, recreation trends, and demographic conditions

## **Methodology for Model Development**

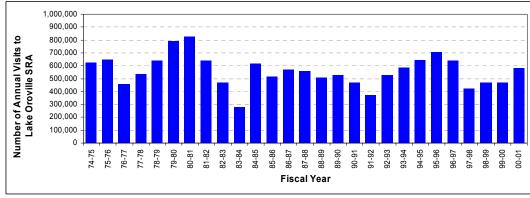
- Assemble and review attendance data
- Assess potential models to fit the attendance data
- Assemble data for explanatory variables
- Conduct regression analysis to identify a Base Model (including Functional Form)
- Test alternative variables with the Base Model to improve model fit
- Test temporal consistency of the data
- Select a set of expanded models and a preferred model
- Perform diagnostic tests for autocorrelation in the preferred model and develop model corrections, as necessary

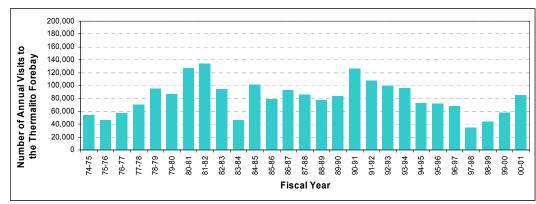
## **Model Outputs**

- Estimates of annual recreation use at Lake Oroville and the Thermalito Forebay, as measured in visitor-days
- These estimates can be disaggregated to specific recreation areas (subunits) based on the historical "shares" that each subunit represents

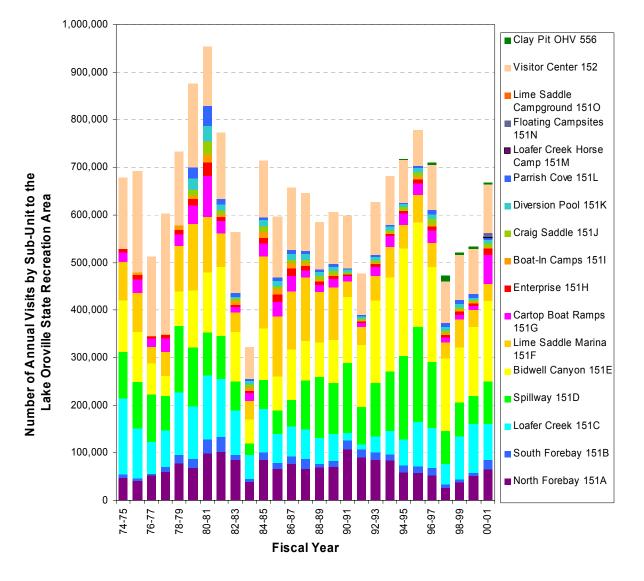
## **FERC Guidelines on Recreation Studies for Relicensing**

 Application for Relicense of a Hydroelectric Generating Facility shall include estimates of existing and future recreation use within the Study Area





Data Sources: Northern Buttes District and DPR Records Management/HQ



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